WHAT IS CLAIMED IS:

1. A device for inspecting an eccentric bushing having interior and exterior surfaces, said device comprising:

first, second and third holding devices;

a base to which the first holding device is mounted;

a carrier structure to which the second and third holding devices are mounted, said carrier structure being mounted to the base for movement relative to the base between a first position, wherein the second and third holding devices are disposed distal to the first holding device, and a second position, wherein the second and third holding devices are disposed proximate to the first holding device;

a spring disposed between the carrier structure and the base and operable to bias the carrier structure toward the second position;

a gauge mounted to the base and including a display and a movable contact element disposed between the second and third holding devices and biased toward the first holding device, said display being operatively connected to the contact element so as to provide a visual reading indicating the amount of movement of the contact element;

wherein the first, second and third holding devices and the contact element are positioned to allow the eccentric bushing to be placed in an inspection position, wherein the eccentric bushing is disposed between the first holding device and the second and third holding devices, such that the first holding device is disposed against the interior surface of the eccentric bushing and such that the contact element and the second and third holding devices are disposed against the exterior surface of the eccentric bushing, whereby rotation of the eccentric bushing moves the contact element, which causes the display to provide readings showing changes in the distance between the interior and exterior surfaces of the eccentric bushing as the eccentric bushing is rotated.

2. The device of claim 1, wherein the second and third holding devices each comprise a rotatable roller.

3. The device of claim 1, wherein the first holding device comprises a rotatable roller.

4. The device of claim 1, wherein the first, second and third holding devices each comprise a rotatable roller.

5. The device of claim 4, wherein the display comprises a pointer movable relative to graduated dial, and wherein the pointer is connected to the contact element by an elongated actuator rod.

6. The device of claim 4, wherein the rollers are cylindrical and are arranged in a triangular configuration.

7. The device of claim 4, wherein the gauge further comprises a housing to which the display is secured, and wherein the gauge is movably mounted to the base to permit the contact element to be moved to accommodate eccentric bushings of varying diameter.

8. The device of claim 7, wherein the gauge further comprises a mounting rod secured to the housing, at least a portion of said mounting rod being slidably received in an elongated bore formed in the base, thereby mounting the gauge to the base.

9. The device of claim 8, further comprising a locking mechanism for locking the mounting rod in a selected position within the elongated bore.

10. The device of claim 9, wherein the locking mechanism includes a contact rod that is at least partially disposed in a cross bore formed in the base and that intersects the elongated bore, said contact rod be movable to selectively engage and disengage the mounting rod.

11. The device of claim 1, wherein the carrier structure includes a pair of spaced- apart arms to which the second and third holding devices are mounted, and wherein the first holding device is disposed between the spaced-apart arms.

12. The device of claim 11, wherein the base includes a mount joined to a top surface of a support structure, and wherein the first holding device is mounted to the mount and the mount is disposed between the spaced-apart arms.

13. The device of claim 12 further comprising a lever assembly connected to the base and operable to move the carrier structure from the second position to the first position.

14. The device of claim 13, wherein the lever assembly comprises a lever pivotally connected to the base and a contact device connected to the lever, said contact device including a roller that contacts the carrier structure when the lever is pivoted toward an actuated position.

15. The device of claim 12, wherein the first, second and third holding devices each comprise a cylindrical roller that is rotatable around a center axis.

16. The device of claim 1, wherein the first, second and third holding devices each comprise a hollow cylindrical roller disposed around and rotatably secured to a center axle having a threaded body, wherein the bodies of the center axles for the second and third holding devices are threadably secured in threaded bores formed in the carrier structure, and wherein the body of the of the center axle for the first holding device is threadably secured in a threaded bore formed in the base.

17. A method of inspecting an eccentric bushing having interior and exterior surfaces, said method comprising the steps of:

(a.) providing first, second and third rollers having first, second and third central axes, respectively;

(b) providing a contact element;

(c.) holding the first roller such that the first roller is rotatable around the first central axis and such that the first central axis is fixed in position;

(d.) holding the second and third rollers such that the second and third rollers are rotatable around the second and third central axes, respectively, and such that the second and third central axes are fixed in position relative to each other, but are movable relative to the first central axis in a direction perpendicular to the first central axis, and such that the first, second and third central axes are arranged in a triangular configuration;

(e.) holding the contact element so as to be movable along a linear path extending between the second and third rollers;

(f.) positioning the eccentric bushing between the first roller and the second and third rollers, such that the first roller is disposed against the interior surface of the eccentric bushing and such that the contact element and the second and third rollers are disposed against the exterior surface of the eccentric bushing;

(g.) applying a biasing force to the second and third rollers that urges the second and third rollers toward the first roller;

(h.) applying a biasing force to the contact element that urges the contact element toward the first roller;

(i.) rotating the eccentric bushing while the eccentric bushing is disposed between the first roller and the second and third rollers, whereby rotation of the eccentric bushing moves the contact element; and

(j.) measuring the movement of the contact element to provide a measure of the changes in distance between the interior and exterior surfaces of the eccentric bushing as the eccentric bushing is rotated.

18. The method of claim 17, wherein steps (c.) and (d.) are performed using a base to which the first roller is mounted for rotation and a carrier structure to which the

second and third rollers are mounted for rotation, wherein said carrier structure is mounted to the base for movement relative to the base between a first position, wherein the second and third rollers are disposed distal to the first roller, and a second position, wherein the second and third rollers are disposed proximate to the first roller.

19. The method of claim 18, wherein step (g.) is performed using a spring disposed between the carrier structure and the base, wherein the spring is operable to bias the carrier structure toward the second position.

20. The method of claim 18, wherein step (f.) comprises the steps of:
(k.) moving the second and third rollers away from the first roller;
(l.) placing the eccentric bushing over the first roller; and
(m.) moving the second and third rollers toward the first roller.

21. The method of claim 22, wherein step (k.) is performed using a lever that is pivotally connected to the base and has a contact device mounted thereto.

22. The method of claim 21, wherein in step (k), the lever is pivoted toward the first roller so that the contact device contacts the carrier structure and moves the carrier structure to the first position.

23. The method of claim 17, wherein steps (g.) and (h.) are performed during the performance of step (i.).

24. The method of claim 23, wherein steps (c.), (d.) and (e.) are also performed during the performance of step (i.).